



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,590	10/25/2006	Keith Clark	03-0009/US1 (8470-69/NPB)	6065
29293	7590	10/14/2009		EXAMINER
FREUDENBERG-NOK GENERAL PARTNERSHIP LEGAL DEPARTMENT 47690 EAST ANCHOR COURT PLYMOUTH, MI 48170-2455				PATEL, VISHAL A
			ART UNIT	PAPER NUMBER
				3676
NOTIFICATION DATE	DELIVERY MODE			
10/14/2009	ELECTRONIC			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

fngp@hdp.com
mlp@fngp.com
PatentPros@fngp.com

Office Action Summary	Application No. 10/553,590	Applicant(s) CLARK, KEITH
	Examiner Vishal Patel	Art Unit 3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 June 2009.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5 and 7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5 and 7 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/0256/06)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Angelo et al (US. 6,170,992).

Angelo discloses a unitized pinion seal in an assembled state, the unitized pinion seal having a sleeve (e.g. 19) including a first axially extending ring portion (e.g. 21) covered with an elastomeric seal layer, a radially extending portion (e.g. 22) extending radially outward from an end of the first axially extending ring portion and a second axially extending ring portion (e.g. portion having 24 and 57) extending axially from a radially outer end of the radially extending portion, a retainer (e.g. 15 and 16) having a first axially extending portion (e.g. 23 that is contacted to 27 at initial installation process, hence having an interference contact between surface of 23 and 27, column 2, line 65 to column 3 line 3) slidably mounted to the second axially extending ring portion of the sleeve in a radial interference fit and having a second portion (e.g. portion embedded into 16 and 16 that is capable being used to mount to a stationary member), the first axially extending portion having a smaller diameter than the second portion of the retainer (e.g. diameter of the second portion is the outer diameter of 16 which is larger than

the an outer diameter of 15), a seal (e.g. 17) mounted to the retainer and engaging the first axially extending ring portion of the sleeve and the retainer portion is disengaged from the sleeve during assembly of the sleeve on to the first member (this would be the case since the member 23 and 27 are out of contact when fully assembled). Furthermore the unitized pinion seal is capable of being mounted to first and second members.

Regarding claim 2: The first member is an axial companion flange and the second member is a carrier/bearing cage (intended use limitations, the first and second members can be these types of elements as claimed in claim 2).

Regarding claims 3-5: The sleeve is adapted to install to the first member with a radial interference fit such that the radial interference fit of the seal to the sleeve creates a greater axial retention load than an axial installation load created by the interference fit of the sleeve relative to the first member (intended use and the invention of Angelo is capable of this since the invention has all the structural limitations claimed by applicant in claim 1). The seal retainer includes a first retainer ring (e.g. 27) engaging the sleeve prior to assembly of the unitized pinion seal to the first member. The retainer portion includes a second retainer ring (e.g. 16 and portion embedded into 16) engaging the seal body.

3. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Romero et al (US. 5,186,472).

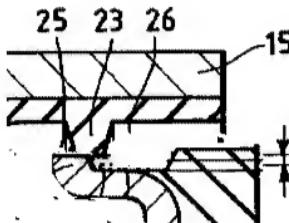
Romero discloses a unitized pinion seal comprising a sleeve (e.g. sleeve having 24) including an outer surface having a ramp portion (e.g. ram portion on 24 between two cylindrical portions) disposed between an axially extending forward cylindrical portion (e.g. portion that is in contact with 48) and an axially extending rear cylindrical portion (e.g. rear cylindrical portion

in contact with 42), wherein the axially extending forward cylindrical portion has a smaller diameter than the axially extending rear cylindrical portion (e.g. as seen in figure), a seal (e.g. 40) supported by a retainer (e.g. retainer having 36), the retainer including a first axially extending portion (e.g. 50) which is mounted to an axially extending surface (e.g. axial surface of 54 that contacts 50) of the sleeve in a radial interference fit and the retainer including a second portion (e.g. portion 18) and the seal including a first seal lip (e.g. lip of 48) engaging the axially extending forward cylindrical portion and a second seal lip (e.g. 42) engaging the axially extending rear cylindrical portion.

Response to Arguments

4. Applicant's arguments filed 6/11/09 have been fully considered but they are not persuasive.

Applicants' argument that the reference of Angelo does not disclose "...a retainer...fit..." is not persuasive because the reference teaches this in column 2, line 56 to column 3, line 3, "the diameter...each other". This teaches to have an initial assembly, where the surfaces of 23 and 27 keep the seal in an initial assembly state as claimed by applicant. Furthermore applicant argument that Angelo does not discloses "a retainer...interference fit" is not persuasive in view of what Angelo stated in column 2, line 56 to column 3, line 3. See figure below of potential initial position as stated by Angelo.



Applicants' argument to Romero is also not persuasive because the reference teaches initial position in figure 2, where 50 contacts the axially extending surface of the sleeve.

5. Applicants' argument that Romero does not disclose the smaller diameter forward cylindrical portion and a second lip engaging the larger diameter rear cylindrical portion is not persuasive because Romero teaches these limitations (see above rejection).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./
Primary Examiner, Art Unit 3676

/Vishal Patel/
Primary Examiner, Art Unit 3676